

# Affri 3001 Shore A Hardness Tester

Can work in accordance with: ASTM 2240, ISO R.868, DIN 53505, JIS K7215



This portable hardness tester, tests by using a point which penetrates the material under spring pressure, with variable force depending on the model. A direct reading is displayed on the dial which is graduated from 0 to 100 Shore Hardness Units.

### **Features**

In compliance with ISO R.868, ASTM 2240, DIN 53505, JIS K7215 specs.

Slim measuring nose to ensure exact measurement, as well as on small components. Suitable for tires, soft flexible rubber, plastic, PVC, polyester, neoprene, leather, Thiokol & Nitrile rubbers, medical components, paper, sponge, etc. using **Shore A, B, C, D, O, OO, E, M, 000, 000-S** scales.

Optional clamping system to apply a constant and vertical pressure on all test pieces, also on curved surfaces assuring accurate results. The tester can be installed on the relative bench support for laboratory purposes

#### With tungsten tip which outlasts hardened steel up to ten times

3001 Shore A Soft, flexible rubber, plastic, PVC, pol	lyester, neoprene, leather, Thiokol & Nitrile rubbers, tyres
3011 Shore B Same as A scale for high values	
3004 Shore C Same as D scale for low values	
3002 Shore D Scale for hard and rigid surfaces synt	thetic materials, acrylics, plexiglass,
3010 Shore DO Same as B and C	
3009 Shore O Same as A scale for low values	
3008 Shore OO For sponge, natural rubber, silicone	
3013 Shore E ASTM D 2240 - 02 a	
3014 Shore M ASTM D 2240 - 02 a	
3015 Shore 000 ASTM D 2240 - 02 a	
3016 Shore 000-S ASTM D 2240 - 02 a	







## **Technical Specifications**

Shore A	ASTM E2240 / ISO 7619	Frustum 35°	Soft surfaces, flexible rubber, natural rubber, plastic, PVC, polyester, neoprene, leather, nitrile rubbers, tyres, etc Hard and rigid surfaces, ceramic and composites, acrylics, plexiglass, print rolls, cellulose, acetates, nylon, etc								
Shore D	ASTM E2240 / ISO 7619	Cone 30°									
Shore B	ASTM E2240	Cone 30°	Medium values. As A scale for higher values.								
Shore C	ASTM E2240	Frustum 35°	Medium-hard values. As D scale for lower values.								
Shore DO	ASTM E2240	Ball 1.2 mm	From medium-hard to hard values. As B and C.								
Shore O	ASTM E2240	Ball 1.2 mm	Low values and very flexible materials. As A scale for low values.								
Shore OO	ASTM E2240	Ball 1.2 mm	Very soft rubbers, sponges, expanded rubber, foam rubber, natural rubber and silicon								
Shore E	ASTM E2240	Ball 2.5 mm	Very soft rubbers, natural rubber, elastomers, casting resin, soft PVC, leather, etc.								
Shore M	ASTM E2240	Cone 30°	As A scale, for thin specimens and elastomer materials.								
Shore 000	ASTM E2240	Ball 6.35 mm	Ultra-soft rubbers, sponges, expanded rubber, foam rubber, natural rubber and silicon.								
Shore 000-S	ASTM E2240	Ball 10.7 mm	Ultra-soft rubbers, viscoelastic polymers.								

	soft																	hard
Α					10	20	30	40	50	60	70	80	90	100				
В						10	20	30	40	50	60	70	80	90	100			
С							10		20	30	40	50	60	70	80	90	100	
D DO								10		20	30	40	50	60	70	80	90	100
DO						10	20		30	40		50	60	7	0	80	90	100
0				10	20	30	40	50	60	70	8	30	90	100				
00	10	20	30	40	50	60	70	80	90	100								

Indicative range for each scale (this cannot be used as a conversion reference)

## **Packing List**

Affri Shore "A"

Calibration Tester - to Check Accuracy to ISO

Calibration Certificate

Conformance Certificate to ISO R.868

Soft Plastic Carry Pouch







